

New PCT National Phase Application  
Docket No. 10400-000091/US/NPB  
**IN THE CLAIMS**

This is a complete and current listing of the claims, marked with status identifiers in parentheses. The following listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A test kit for detecting periodontal disease in a patient by analysing a sample from the oral cavity of the patient, ~~wherein said kit at least comprises~~comprising:

a first detection assay for detecting a first substance originating from bacteria,~~;~~ and

a second detection assay for detecting a second substance originating from ~~the~~at least one of an immune and an~~er~~ inflammatory system of the patient.

2. (Currently Amended) A test kit according to claim 1, wherein said first detection assay comprises at least a first affinity ligand having a binding site for binding said first substance originating from bacteria, and

said second detection assay comprises at least a second affinity ligand having binding site for binding said second substance originating from at least one of an~~the immune or and an~~ inflammatory system of the patient.

3. (Currently Amended) A test kit according to claim 1 ~~or 2~~, wherein said first substance is a bacterial virulence product.

4. (Original) A test kit according to claim 3, wherein said first substance is an enzyme.

5. (Original) A test kit according to claim 4, wherein said enzyme is a protease.

6. (Original) A test kit according to claim 5, wherein said protease is selected from the group consisting of arg-gingipain from *Porphyromonas gingivalis* and a 48 kDa protease from *Bacteroides forsythus*.

7. (Original) A test kit according to claim 3, wherein said first substance is a toxin.

8. (Original) A test kit according to claim 7, wherein said toxin is a leukotoxin from *Actinobacillus actinomycetemcomitans*.

9. (Currently Amended) A test kit according to ~~any of the preceding claims~~ claim 1, wherein said second substance is a leukocyte product.

10. (Original) A test kit according to claim 9, wherein said leukocyte product is a natural serine protease.

11. (Original) A test kit according to claim 10, wherein said natural serine protease is a human neutrophil elastase.

12. (Currently Amended) A test kit according to ~~any of the claims 1-8~~ claim 1, wherein said second substance is a cytokine.

13. (Original) A test kit according to claim 12, wherein said cytokine is an interleukin.

14. (Original) A test kit according to claim 13, wherein said interleukin is chosen from among interleukin-1 $\beta$ , interleukin-6 and interleukin-8.

15. (Original) A test kit according to claim 12, wherein said cytokine is an inflammatory mediator.

16. (Original) A test kit according to claim 15, wherein said inflammatory mediator is selected from the group consisting of tumour necrosis factor- $\alpha$  and prostaglandin E<sub>2</sub>.

17. (Currently Amended) A test kit according to ~~any of the claims 2 to 16~~claim 2, wherein said first affinity ligand is a first antibody exhibiting selective binding of said first substance and said second affinity ligand is a second antibody exhibiting selective binding of said second substance.

18. (Original) A test kit according to claim 17, wherein each of said first and second detection assays provides an immunochromatographic assay.

19. (Currently Amended) A test kit according to ~~any of the preceding claims~~claim 1, further comprising a support provided with a sample reservoir for receiving said sample, wherein said first and second detection assays are arranged on said support in contact with said sample reservoir, directly or via a removably arranged separating means which separates said sample reservoir from said detection assays.

20. (Currently Amended) A test kit according to ~~any of the preceding claims~~claim 1, further comprising additional buffers for dilution and adaptation of said sample for said detection assays.

21. (Original) A test kit according to claim 20, further comprising a buffer reservoir separate from said sample reservoir.

22. (Currently Amended) A test kit according to ~~any of the preceding claims~~ claim 1, further comprising at least one sampling device for obtaining said sample.

23. (Currently Amended) The use of a test kit according to ~~any of the preceding claims~~ claim 1 for detecting periodontal disease.

24. (Currently Amended) A method for at least one of diagnosing periodontal diseases and/or predicting ~~the a~~ a risk for progress of periodontal ~~said~~ diseases, said method comprising:

analyzing a sample from ~~the an~~ an oral cavity of a patient for ~~the a~~ a presence of at least a first substance originating from bacteria and ~~the a~~ a presence of a second substance originating from ~~the at least one of an immune and an~~ at least one of an immune and an inflammatory system of the patient.

25. (Original) A method according to claim 24, wherein said first substance is a bacterial virulence product.

26. (Currently Amended) A method according to ~~claims~~ claim 25, wherein said first substance is an enzyme.

27. (Original) A method according to claim 26, wherein said enzyme is a protease.

28. (Original) A method according to claim 27, wherein said protease is selected from the group consisting of arg-

gingipain from Porphyromonas gingivalis and a 48 kDa protease from Bacteroides forsythus.

29. (Original) A method according to claim 25, wherein said first substance is a toxin.

30. (Original) A method according to claim 29, wherein said toxin is a leukotoxin from Actinobacillus actinomycetemcomitans.

31. (Currently Amended) A method according to ~~any of the claims 24-30~~ claim 24, wherein said second substance is a leukocyte product.

32. (Original) A method according to claim 30, wherein said leukocyte product is a natural serine protease.

33. (Original) A method according to claim 32, wherein said natural serine protease is a human neutrophil elastase.

34. (Currently Amended) A method according to ~~any of the claims 24-30~~ claim 24, wherein said second substance is a cytokine.

35. (Original) A method according to claim 36, wherein said cytokine is an interleukin.

36. (Original) A method according to claim 35, wherein said interleukin is chosen from among interleukin-1 $\beta$ , interleukin-6 and interleukin-8.

37. (Original) A method according to claim 36, wherein said cytokine is an inflammatory mediator.

38. (Original) A method according to claim 37, wherein said inflammatory mediator is selected from the group consisting of tumour necrosis factor- $\alpha$ ' and prostaglandin E<sub>2</sub>.

39. (Currently Amended) A method according to ~~any of the claims 24-38~~ claim 24, wherein said analyzing comprises analyzing said sample with a first method that selectively detects the presence of said first substance and a second method that selectively detects the presence of said second substance.

40. (Original) A method according to claim 39, wherein said first method comprises using a first antibody exhibiting selective binding of said first substance and wherein said second method comprises using a second antibody exhibiting selective binding of said second substance.

41. (Original) A method according to claim 40, wherein at least one of said first and second methods comprises using an immunochromatographic assay.